

REMARKS

Claims 1 - 19 remain active in this application. Claims 1 - 9 have been withdrawn from consideration as being non-elected, with traverse, in response to a requirement for restriction. The indication of allowability of claims 13 - 15 is again noted with appreciation. Amendment of claims 11-13 and 15-19 has been requested to improve form and descriptiveness in response to criticisms by the Examiner. No new matter has been introduced into the application.

Claims 11-13 and 15-19 have been rejected under 35 U.S.C. §112, second paragraph, due to inadequate antecedent language correspondence. This ground of rejection is respectfully traversed as being moot in view of the above-requested amendments. Accordingly, reconsideration and withdrawal of this ground of rejection are respectfully requested.

Claims 10 - 12 and 16 - 19 have again been rejected under 35 U.S.C. §102 as being anticipated by Hachimene et al. This ground of rejection is again respectfully traversed for the reasons of record and the further reasons detailed in the following remarks.

At the outset, it should be noted that with regard to a rejection under 35 U.S.C. §102, MPEP 2131 expressly states that “to anticipate a claim, the reference must teach every element in the claim” either expressly or inherently (emphasis added). Further, MPEP 2131, citing *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1051, 1053 (Fed. Cir. 1987), states “[t]he identical invention must be shown in as complete detail as is contained in the . . . claim.” If the Examiner chooses to rely on inherency, then MPEP 2112 (IV) states that the Examiner “must provide rationale or evidence tending to show inherency” (emphasis added). In other words, the Examiner “must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art” (emphasis in original). MPEP 2112 (IV), quoting *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). Although the Examiner has continuously asserted that layer 15 in Hachimene inherently anticipates the shear force isolation layer of the present invention (see page 4 of the Office Action), the Examiner has also continuously failed to provide any factual basis or technical rational to support the alleged inherency and has thus failed to meet the Examiner’s burden of making a *prima facie* demonstration of the propriety of the rejection asserted.

In particular, the Examiner relies on element 15 described at paragraph 170 of Hachimine as anticipating the shear force isolation layer of the present invention. Paragraph 170 states layer 15 is an insulating film made of a silicon oxide film. However, at no point does Hachimine teach or suggest layer 15 to be a “shear force isolation layer.” To the contrary, Hachimine describes layer 15 to be used as an etch stop when the silicon nitride film 14b is removed (see paragraph 207 - “In short, the insulating film 15 plays a role of an etching stopper upon removal of the silicon nitride film 14b”). Furthermore, it is clearly indicated in the specification that Hachimine did not observe or consider shear stress isolation because Hachimine teaches the removal of the stressed silicon nitride film 14b in order to complete the device.

Assuming, *arguendo*, that the Examiner did establish a *prima facie* case of inherency, Hachimine itself provides ample evidence that stress isolation is not an inherent function or property layer 15. The Examiner has previously asserted that layer 15 of Hachimine would read on the claim limitations of the present invention because layer 15 is made of silicon oxide film. While the shear stress isolation layer 12, 120 of the present invention is a dielectric oxide layer, it is well known in the art that not all dielectric layers and not even all silicon oxide layers can provide stress isolation. The Examiner’s inference that silicon oxide layers are necessarily capable of providing shear force isolation would be an exercise in impermissible hindsight reconstruction. Further, the Examiner’s inference is not an inherent feature that “necessarily flows” from subject matter actually disclosed by Hachimine. In particular, as previously discussed, Hachimine describes the stress interaction with stressed layer 14a if stressed layer 14b is not removed where it overlies layer 14a, **even if layer 15 were to be left in place** (see paragraph 214 in Hachimine). This clearly shows that Hachimine did not achieve or observe stress isolation from the exemplary silicon oxide insulating film disclosed for layer 15 but, on the contrary, that Hachimine observed that stress isolation was not achieved. Thus, the Examiner has completely failed to show inherency, and has continued to assert inherency which is unsupported by the reference relied upon.

In addition, and again assuming, *arguendo*, that the Examiner had established a *prima facie* case of inherency through the description in Hachimine, that *prima facie* demonstration is rebuttable and Applicant has submitted documentation of forms of silicon oxide which are incapable of performing the function of stress isolation. It is respectfully submitted that such documentation is a full and complete rebuttal of the Examiner’s position, particularly since it is

merely an unsupported assertion. The Examiner has not responded to the materials submitted with the response of December 13, 2005 that clearly demonstrates that silicon oxide is used to impart or communicate stress, rather than to isolate semiconductor structures from stress. Thus, in view of the disclosure in Hachimine at paragraph 214, as discussed above, as well as the previously submitted articles that demonstrate the functions of silicon oxide, the Examiner, by not making a response to the submitted documentation, has effectively acquiesced in Applicant's rebuttal of the Examiner's assertion even though the Examiner persists in the unsupported assertion of inherency, which a *prima facie* demonstration of anticipation has not, in fact, been made.

Accordingly, it is clear that the sole ground of rejection in this application is in error and no *prima facie* demonstration of anticipation by inherency has been or can be made based on Hachimine and, to the extent, if any, that the Examiner's assertion of inherency is proper, it has been fully rebutted without reply by the Examiner. The statement of the rejection clearly indicates that either impermissible hindsight has been employed in substantial degree and/or that salient explicit recitations of the claims have been ignored. Again, in this regard, inherency requires that evidence of inherency be demonstrated by the Examiner to show that subject matter deemed inherent necessarily and unavoidably flows therefrom; a burden much greater than merely asserting inherency to support an assumption based on hindsight in light of the present disclosure. The reference relied upon simply does not contain the teachings of suggestions which the Examiner evidently attributes to them, do not provide evidence of a level of ordinary skill in the art which would support the asserted conclusion of anticipation and does not lead to an expectation of success in achieving the meritorious effects of the invention, particularly by providing the distinguishing features claimed. Accordingly, it is respectfully submitted that the sole ground of rejection in this application is untenable and, upon reconsideration, should be withdrawn.

Since all rejections, objections and requirements contained in the outstanding official action have been fully answered and shown to be in error and/or inapplicable to the present claims, it is respectfully submitted that reconsideration is now in order under the provisions of 37 C.F.R. §1.111(b) and such reconsideration is respectfully requested. Upon reconsideration, it is also respectfully submitted that this application is in condition for allowance and such action is therefore respectfully requested.

If an extension of time is required for this response to be considered as being timely filed, a conditional petition is hereby made for such extension of time. Please charge any deficiencies in fees and credit any overpayment of fees to Deposit Account No. 09-0458 of International Business Machines Corporation (East Fishkill).

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Marshall M. Curtis". The signature is fluid and cursive, with a large initial 'M' and a trailing flourish.

Marshall M. Curtis
Reg. No. 33,138

Whitham, Curtis, Christofferson & Cook, P.C.
11491 Sunset Hills Road, Suite 340
Reston, Virginia 20190
(703) 787-9400

Customer Number: **30743**